

UC Irvine

UC Irvine Previously Published Works

Title

Sumoylation Silences the Plasma Membrane Leak K⁺ Channel K2P1

Permalink

<https://escholarship.org/uc/item/2b91g5bk>

Journal

Cell, 141(2)

ISSN

0092-8674

Authors

Rajan, S
Plant, LD
Rabin, ML
et al.

Publication Date

2010

DOI

10.1016/j.cell.2010.03.027

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

Sumoylation Silences the Plasma Membrane Leak K⁺ Channel K2P1

Sindhu Rajan, Leigh D. Plant, Michael L. Rabin, Margaret H. Butler, and Steve A.N. Goldstein*

*Correspondence: sangoldstein@uchicago.edu

DOI 10.1016/j.cell.2010.03.027

(Cell 121, 37–47; April 8, 2005)

In preparing Figure 3 of this article for publication, we inadvertently assembled duplicated images of lane 1 in lanes 3 and 5 of panel B and a duplicated image of lane 1 in lane 3 of panel D. A corrected Figure 3 is shown below. The new figure does not alter any of the conclusions of the study.

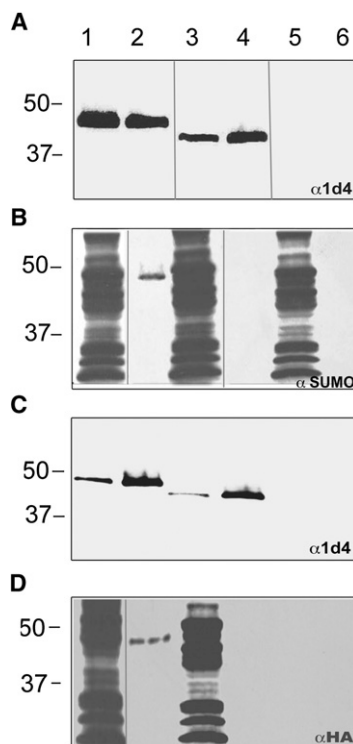


Figure 3. K2P1 Is Modified by Native or Overexpressed SUMO on Lysine 274

Oocytes were injected with cRNA for the indicated subunits, incubated for 48 hr, and proteins purified by immunoprecipitation (IP) with 1d4 antibodies for separation by SDS-PAGE and western blotting.

Nonessential intervening lanes have been removed as indicated by the black lines.

(A) Cells expressing K2P1-1d4 or K274E-K2P1-1d4 blotted with anti-1d4 antibodies. Lane 1: K2P1-1d4 total extract. Lane 2: IP of lane 1 material with 1d4 antibody. Lane 3: K274E-K2P1-1d4 total extract. Lane 4: IP of lane 3 with 1d4 antibody; the point mutant migrates with a lower apparent kDa than wild-type. Lane 5 is total extract from mock-injected cells. Lane 6: IP of lane 5 with 1d4 antibody.

(B) Materials as in (A) visualized with an antibody to SUMO-1 showing that many native proteins are sumoylated (lanes 1, 3, and 5), as is K2P1-1d4 (lane 2), whereas K274E-K2P1-1d4 does not carry SUMO (lane 4).

(C) Cells expressing K2P1-1d4 or K274E-K2P1-1d4 and human HA-SUMO blotted with anti-1d4 antibodies. Lanes as in (A).

(D) Materials as in (C) visualized with an antibody to HA showing that many native proteins are modified with HA-SUMO (lanes 1 and 3), as is K2P1-1d4 (lane 2), whereas K274E-K2P1-1d4 does not bear HA-SUMO (lane 4).